1. Product Identification

SANILABS	Product Code:	1908
718-234-2900	Product Name:	LTS
5422 18th Avenue	Product Use:	Chlorinated Cleaner
BROOKLYN, NY 11204	Emergency Phone:	CHEMTREC: 800-424-9300

2. Hazard Identification

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s).



GHS Classification:Skin Corrosion:Category 1bEye Damage:Category 1Signal Word:DangerHazard Statements:H314-Causes severe skin burns and eye damage
H290-May be corrosive to metals.

GHS Precautionary Statement(s) – Prevention

P102- Keep out of reach of children

P101- If medical advice is needed, have product container or label at hand.

P103- Read label before use.

P264 - Wash skin and contaminated clothing thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P234 - Keep only in original container.

P280 - Wear gloves, protective clothing, eye and face protection.

P260 - Do not breathe mist, vapors, or spray.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

GHS Precautionary Statement(s) – Response

IF IN EYES - Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a physician .

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call poison control/physician immediately.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Contact a physician immediately if irritation persists. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Specific treatment (see First Aid information on product label and/or Section 4 of the SDS)

GHS Precautionary Statement(s) - Storage

Store in a secure manner.

Store in a well-ventilated place.

Keep cool.

GHS Precautionary Statement(s) - Disposal

Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

Potential Health Effects

Inhalation: Strong irritating to mucous membranes in the nose, throat and respiratory tract. Prolonged contact can cause chronic irritation, pulmonary edema and central nervous system depression. Repeated inhalation exposure may cause impairment of lung function and permanent lung damage.

Skin Contact: Prolonged and repeated exposure to dilute solutions often causes irritation, redness, pain and drying and cracking of the skin. Human evidence has indicated that an ingredient in this product can cause skin sensitization. Depending upon the concentration and how soon after exposure the skin is washed with water, skin contact may cause burns and tissue destruction.

Eye Contact: Strongly irritating to eyes. Exposure to vapor can cause tearing, conjunctivitis and burning of the eyes. Eye contact may cause a corneal injury. The severity of the effects depend on the concentration and how soon after exposure the eyes are washed with water. In severe exposure cases, glaucoma, cataracts and permanent blindness may occur.

Ingestion: Corrosive. Can cause severe corrosion of and damage to the gastrointestinal tract (including mouth, throat, and esophagus). Exposure is characterized by nausea, vomiting, abdominal pain, diarrhea, bleeding, and/or tissue ulceration.

ECOLOGICAL HAZARDS: Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters. This material has exhibited moderate toxicity to aquatic organisms.

PRECAUTIONARY STATEMENTS: Avoid breathing vapors or mist. Avoid contact with skin, eyes, and clothing. Keep container tightly closed. Wash thoroughly after handling/ Use only with adequate ventilation.

3. Composition / Information on Ingredients

Chemical Name:	CAS Number	% By Weight
Sodium Hypochlorite	7681-52-9	8-10

Unless listed immediately above, the product contains no hazardous ingredients as listed on the Massachusetts Hazardous Substance List or under §1910.1200 of Title 29 of the Code of Federal Regulations.

4. First Aid Measures

Eyes	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Washing eyes within several seconds is essential to achieve maximum effectiveness. Get medical attention immediately. Do not stop rinsing eyes until indicated by a doctor/physician.
Skin	Immediately remove any clothing soiled by this product. Immediately flush skin with plenty of water for at least 15 minutes while removing any contaminated clothing and shoes. Continue to rinse until advised by a doctor/physican/poison control.
Ingestion	Do not induce vomiting. If victim is conscious and alert, give 2-4 cups of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Inhalation	Remove from exposure and move to fresh air immediately and keep comfortable for breathing. If breathing is difficult, give oxygen. Call a doctor or poison control center if symptoms persist. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a

bag and a mask. Call a doctor or poison control immediately.

Notes to Physician: Treat symptomatically and supportively. Consult a doctor and/or the nearest Poison Control Centre for all exposures. May cause severe corneal burns.

5. Fire Fighting Measures

Suitable extinguishing media:

Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames. **Combustion Products:** Hydrogen chloride gas, sodium oxides.

6. Accidental Release Measures

Protective Measures: Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator. Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8. Eliminate potential sources of ignition. Handling equipment must be bonded and grounded to prevent sparking.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible sorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to local authorities and/or the National Response Center at (800) 424-8802 as appropriate or required.

7. Handling and Storage

General Storage Information: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner, or disposed of properly. DO NOT USE OR STORE near heat, sparks or open flames. USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Store between the following temperatures: 45°F - 85F. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Chemical Name:	PEL (OSHA)	TWA (ACGIH)	TLV (ACGIH)
Sodium Hyppchlorite	1ppm	0.5ppm	0.5ppm

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH Approved): If exposure is anticipated to be greater than applicable exposure limits, wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators: Air-Purifying Respirator for Organic Vapors Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection. SKIN PROTECTION: Wear chemical resistant protective clothing, including apron, boots or safety shoes depending on the concentration and quantity of the hazardous substance handled. The chemical resistance of the protective equipment should be inquired at the equipment supplier.

EYE PROTECTION: Use chemical safety glasses and/or full face shield where splashing is possible. Maintain eye wash fountain and quick drench facilities in work area.

9. Physical and Chemical Properties

Appearance	Yellow Liquid
рН	13.5
Volatile (% V.O.C. by volume):	0.00
Flashpoint	>200F
Freezing Point	32F
Vapor Pressure (mm Hg	Not Known
Lower Explosion Limits	Not Determined

Odor	Bleach
Specific Gravity	1.20
Solubility In Water	Complete
Melting Point	Not Known
Vapor Density (Air=1):	Not Know
Evaporation Rate (BuAc=1):	Slower Than Water
Upper Explosion Limits	Not Determined

10. Stability & Reactivity

STABILITY: Stable under ordinary conditions of use and storage.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products formed under fire conditions. -Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITIES: Strong acids, Organic materials, Powdered metals, Forms shock-sensitive mixtures with certain other materials., Amines, Reacts violently with ammonia and ammonium salts, aziridine, methanol, and phenylacetonitrile, sometimes resulting in explosions. Reacts with primary aliphatic or aromatic amines to form explosively unstable n-chloroamines. Reaction with formic acid becomes explosive at 55°C.

11. Toxicological Information

The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact. Inhalation will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis. Skin contact with this material may cause severe irritation and corrosion of tissue. Repeated exposure may cause dermatitis. Eye contact can cause severe irritation, corrosion with possible corneal damage and blindness. Ingestion may cause irritation, corrosion/ulceration, nausea, and vomiting.

Chemical Name:		Species	Dose
Sodium Hypochlorite	LD50 Oral	Rat	8910mg/kg
Sodium Hypochlorite	LD50 Dermal	Rabbit	10000mg/kg
Sodium Hypochlorite	LC50	Rat	10.5mg/L

SUMMARY: The concentrated solution is corrosive to skin, and a 5% solution is a severe eye irritant. Solutions

containing more than 5% available chlorine are classified by DOT corrosive (please see section 10 of this MSDS). Toxicity described in animals from single exposures by ingestion include muscular weakness, and hypoactivity. Repeated ingestion exposure in animals caused an increase in the relative weight of adrenal glands in one study, but no pathological changes were observed in two other studies. Long-term administration of compound in drinking water of rats caused depression of the immune system. No adverse changes were observed in an eight week dermal study of a 1% solution in guinea pigs. Tests in animals demonstrate no carcinogenic activity by either the oral or dermal routes. Tests in bacterial and mammalian cell cultures demonstrate mutagenic activity. **CARCINOGENICITY:** None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as carcinogen.

MUTAGENICITY: Sodium Hypochlorite has been shown to produce damage to genetic material when tested in vitro. Studies in vivo have shown no evidence of mutagenic potential for this material. It is judged that the risk of genetic damage is insignificant for sodium hypochlorite because of its biological activity, lack of mutagenicity in vivo, and failure to produce carcinogenic response.

12. Ecological Information

Environmental Fate: Not established Environmental Toxicity: Not available

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Large amounts should be given to a licensed disposal agency. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local regulations.

14. Transportation Information

Transportation Hazard Class	Corrosive	
Placard Required	CTUESTI B	

DOT Classifiation (Domestic, Land)	UN1791, Hypochlorite Solution, (With greater than 5% but less than 16%	
	available chlorine) 8, PGIII	
	Emergency Response Guide No: 154	

15. Regulatory Information

Not Known Not Known.

16. Regulatory Information

DISCLAIMER:

(Continued On Next Page)

See the product label for proper use directions.



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